

**LAMPIRAN D**

**UJI TRIAKSIAL**

***CONSOLIDATED-UNDRAINED***



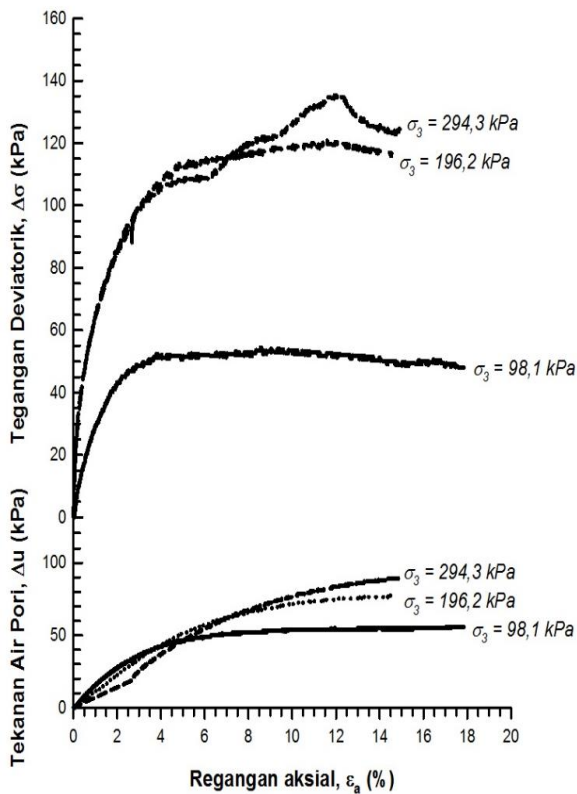
**SOIL MECHANICS LABORATORY**  
**CIVIL ENGINEERING DEPARTEMEN, FACULTY OF ENGINEERING**

**MUHAMMADIYAH UNIVERSITY OF YOGYAKARTA**

Project : Tugas akhir  
 Location : Drum 5 (tanpa kolom SiCC)  
 Bore hole no. : 3Da

Depth :  
 Date : 10-13/01/2017  
 Laboran: Mei Liya Faridatun Khaeza

**TRIAxIAL COMPRESSION TEST**



- Note:
- Side drains
  - Stress/strain curves corrected for :  
 Area changes ✓  
 Membranes -

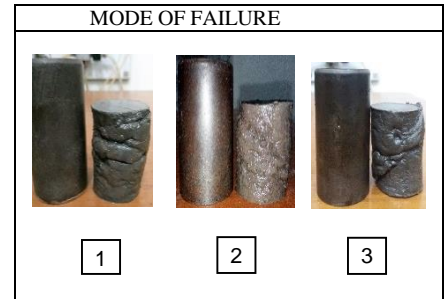
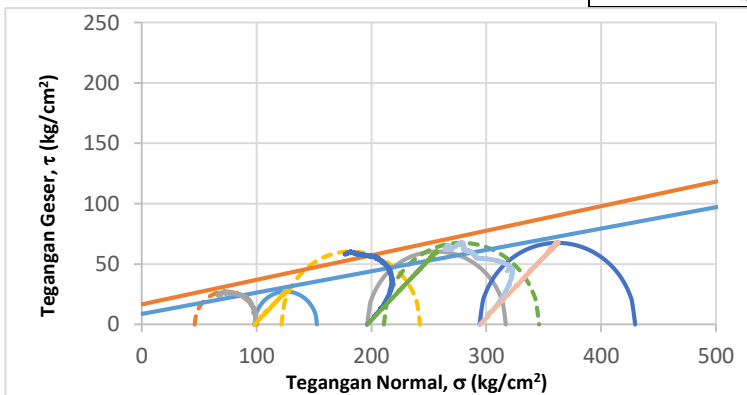
Soil Description:

**1D**

Test condition : **UU/CU/CD**

Type of specimen **UNDISTURBED**

SPECIMEN		1	2	3
DIMENSIONS	Diameter, mm	34,9	35	35,1
	Length, mm	67	67,4	69
INITIAL	Density, Mg/m <sup>3</sup>	1,56	1,55	1,54
	Moisture, %	55,87	58,59	55,02
	Dry Density, mg/m <sup>3</sup>	1,00	1,00	0,99
	Void ratio	1,63	1,64	1,67
	Degree of Saturation, %	90,06	93,79	88,78
AFTER CONSOLIDATION	Density, Mg/m <sup>3</sup>	1,76	1,79	8,04
	Moisture, %			
COMPRESSION STAGE	Cell pressure, kPa	98,10	196,20	294,30
	Initial pwp, kPa			
FAILURE CONDITIONS	Strain %	27,19	60,39	67,61
	(σ <sub>1</sub> - σ <sub>3</sub> ) <sub>f</sub> , kPa	125,29	256,60	361,90
SHEAR STRENGTH PARAMETERS	u <sub>f</sub> , kN/m <sup>2</sup>			
	σ <sub>3</sub> <sup>*</sup> , kPa	98,10	196,20	294,30
	σ <sub>1f</sub> , kPa	152,49	316,99	429,52
		c : 8,80	c': 15,64	kN/m <sup>2</sup>
		φ: 9,98	φ: 11,45	°



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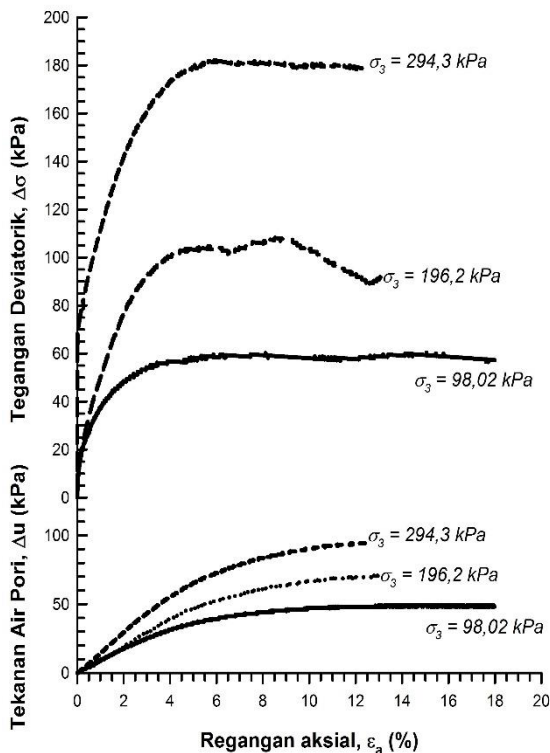
Project : Tugas akhir  
 Location : Drum 2 (menggunakan kolom SiCC)  
 Bore hole no. : 3D

Depth :  
 Date : 12-13/01/2017  
 Laboran: Mei Liya Faridatun Khoaza

**TRIAXIAL COMPRESSION TEST**

Note:

- Side drains
- Stress/strain curves corrected for :  
 Area changes   
 Membranes



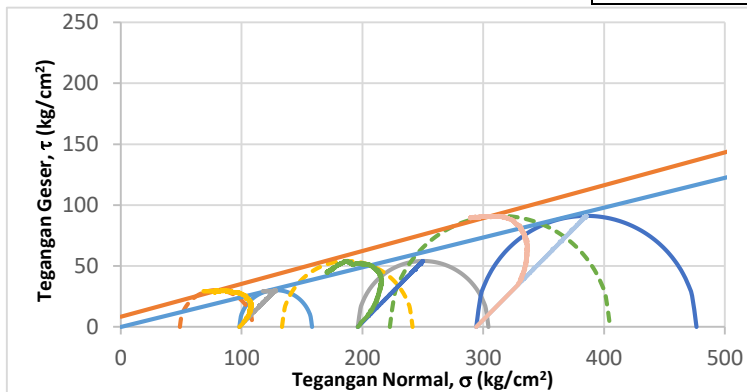
Soil Description:

**ID**

Test condition : **UU/CU/CD**

Type of specimen **UNDISTURBED**

SPECIMEN		1	2	3
DIMENSIONS	Diameter, mm	34,1	34,4	35,1
	Length, mm	70,8	68,7	69,8
INITIAL	Density, Mg/m <sup>3</sup>	1,62	1,66	1,62
	Moisture, %	58,74	52,97	45,41
	Dry Density, mg/m <sup>3</sup>	1,02	1,04	1,02
	Void ratio	1,58	1,52	1,58
	Degree of Saturation, %	97,87	91,57	75,43
AFTER CONSOLIDATION	Density, Mg/m <sup>3</sup>	0,82	0,78	0,80
	Moisture, %			
	Dry Density, Mg/m <sup>3</sup>			
COMPRESSION STAGE	Cell pressure, kPa	98,10	196,20	294,30
	Initial pwp, kPa			
FAILURE CONDITIONS	Strain %	30,11	54,08	91,10
	(σ <sub>1</sub> - σ <sub>3</sub> ) <sub>f</sub> , kPa	128,16	250,27	385,40
SHEAR STRENGTH PARAMETERS	u <sub>f</sub> , kN/m <sup>2</sup>			
	σ <sub>v</sub> ' <sub>f</sub> , kPa	98,10	196,20	294,30
	σ <sub>h</sub> ' <sub>f</sub> , kPa	158,27	304,35	476,50
c : 0		c' : 8,27	kN/m <sup>2</sup>	
φ : 13,75		φ' : 15,12	°	



**MODE OF FAILURE**



1

2

3

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